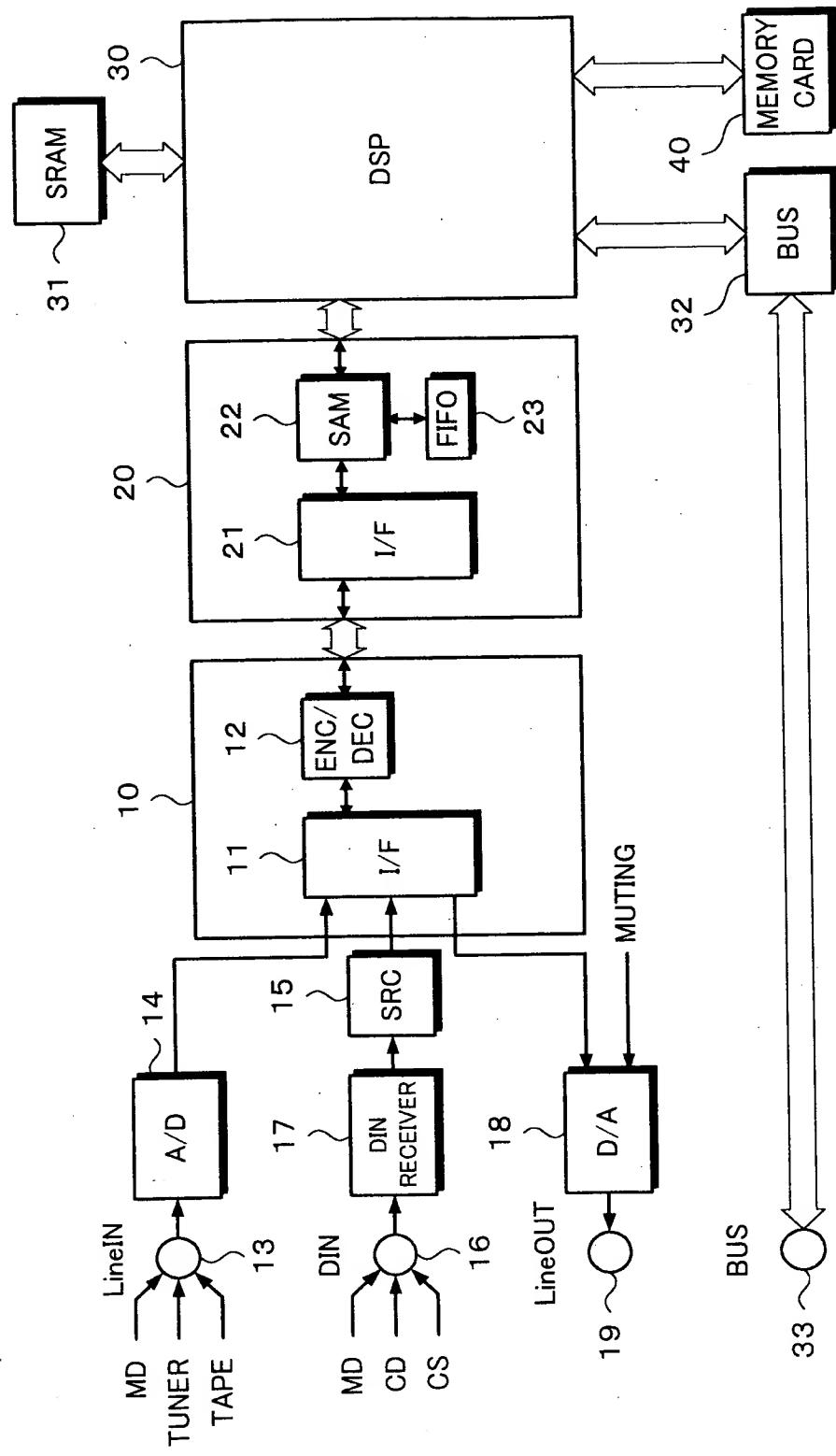


APPROVED	O.G. FIG.
BY..	CLASS
DRAFTSMAN	SUBCLASS

Fig. 1



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

Fig. 2

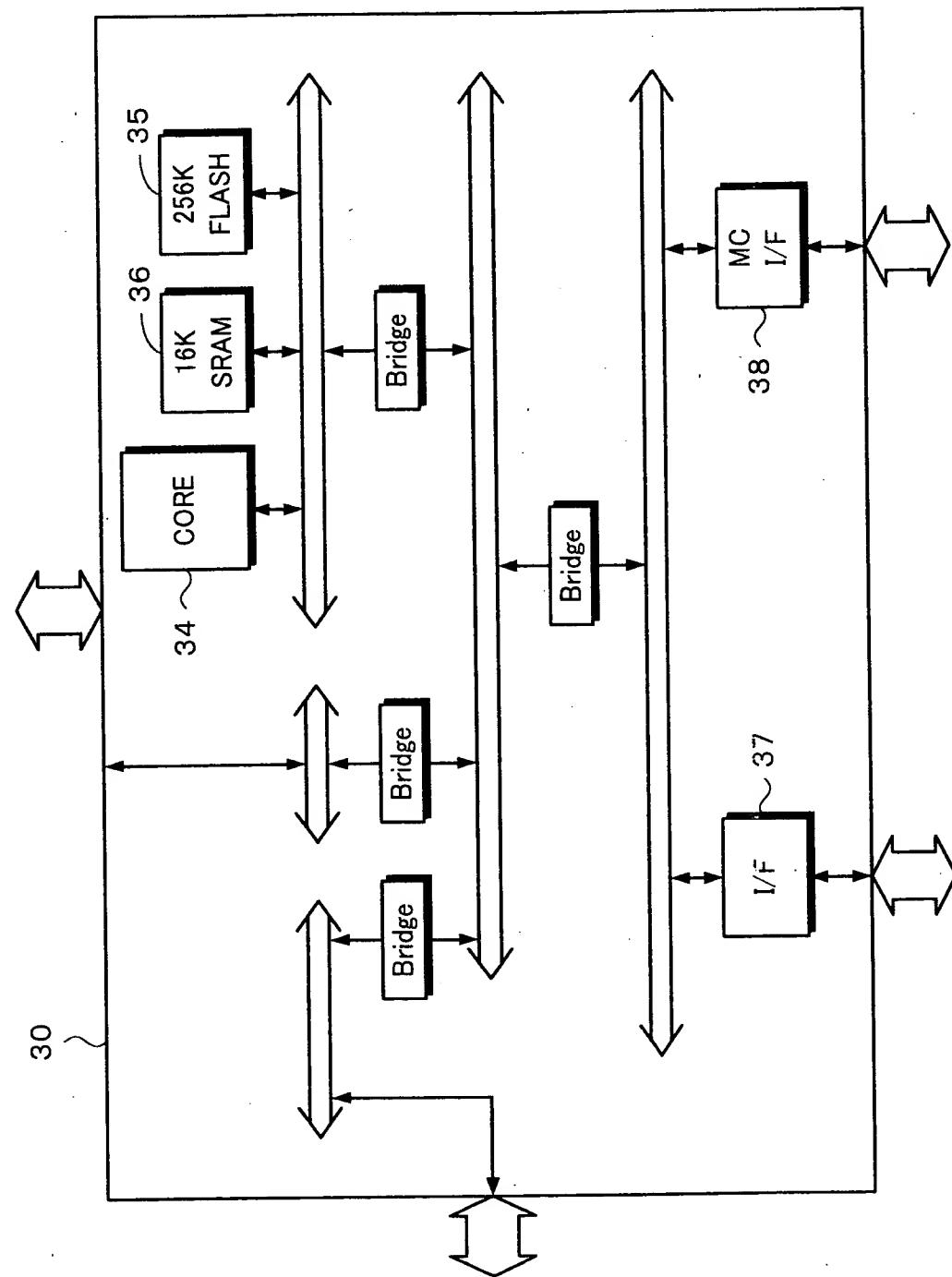
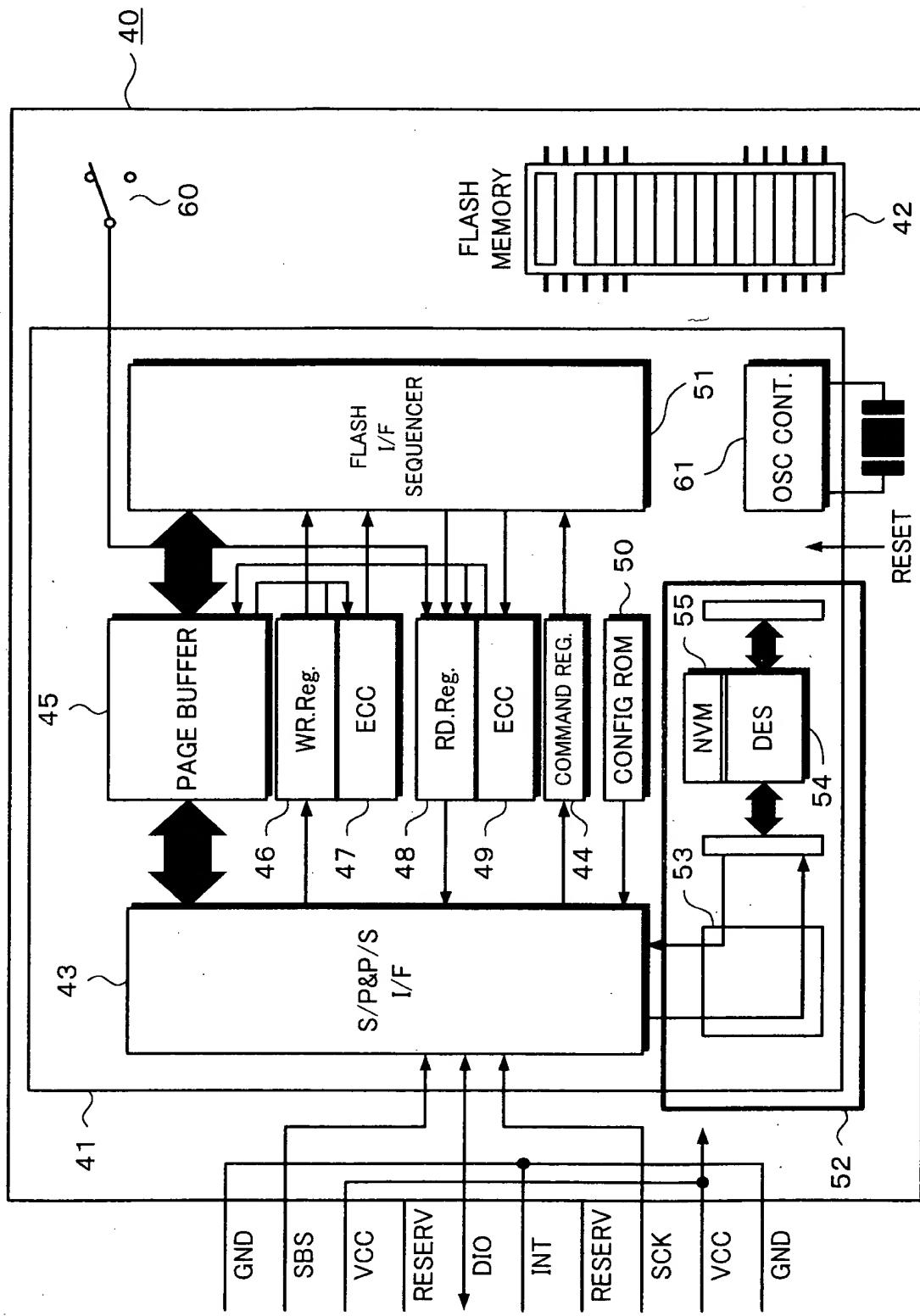
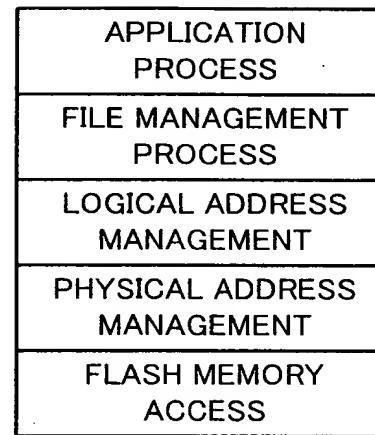


Fig. 3



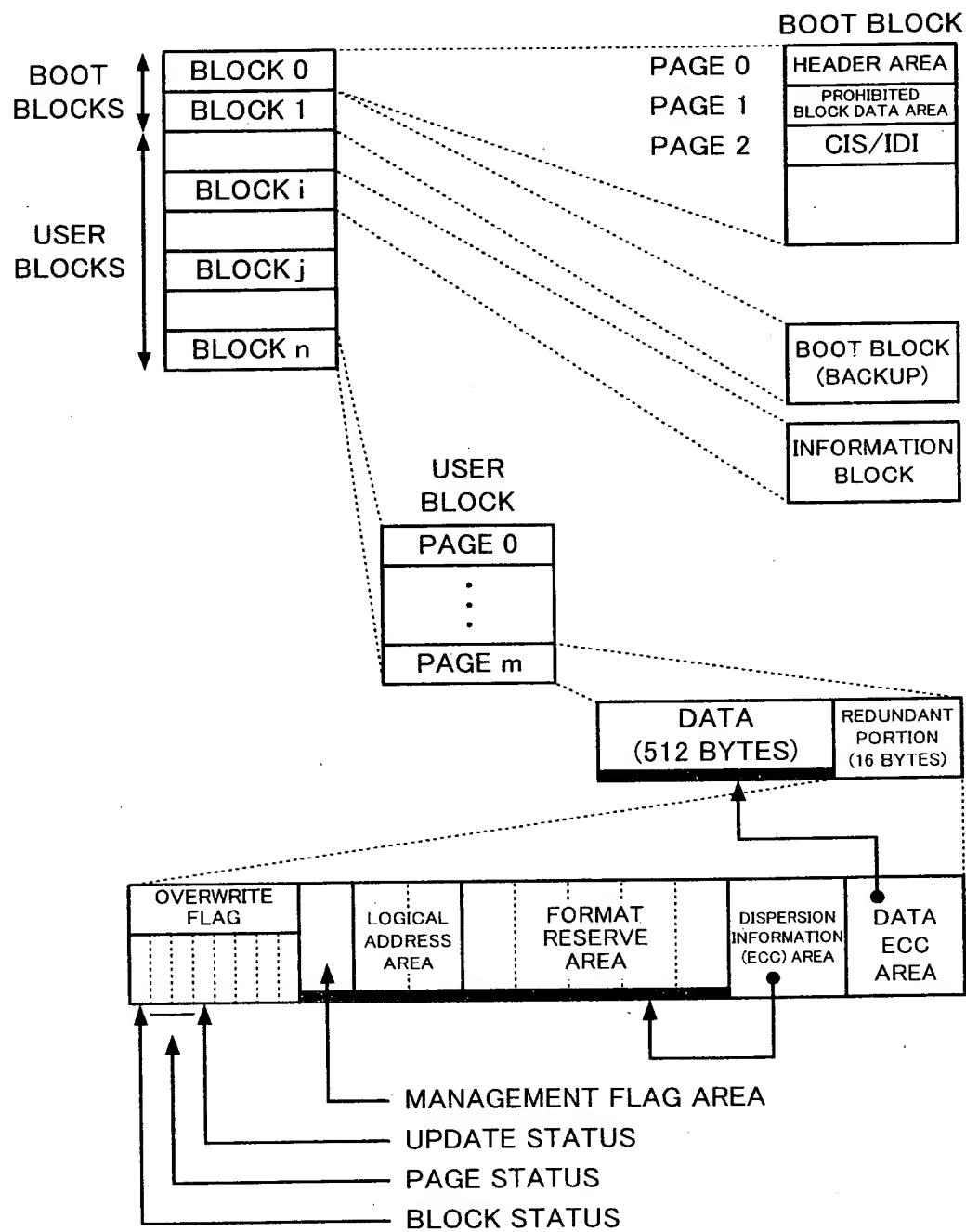
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Fig. 4



FILE SYSTEM PROCESS
HIERARCHY

Fig. 5



APPROVED BY DRAFTSMAN	O.G. FIG. CLASS	SUBCLASS
-----------------------------	--------------------	----------

Fig. 6

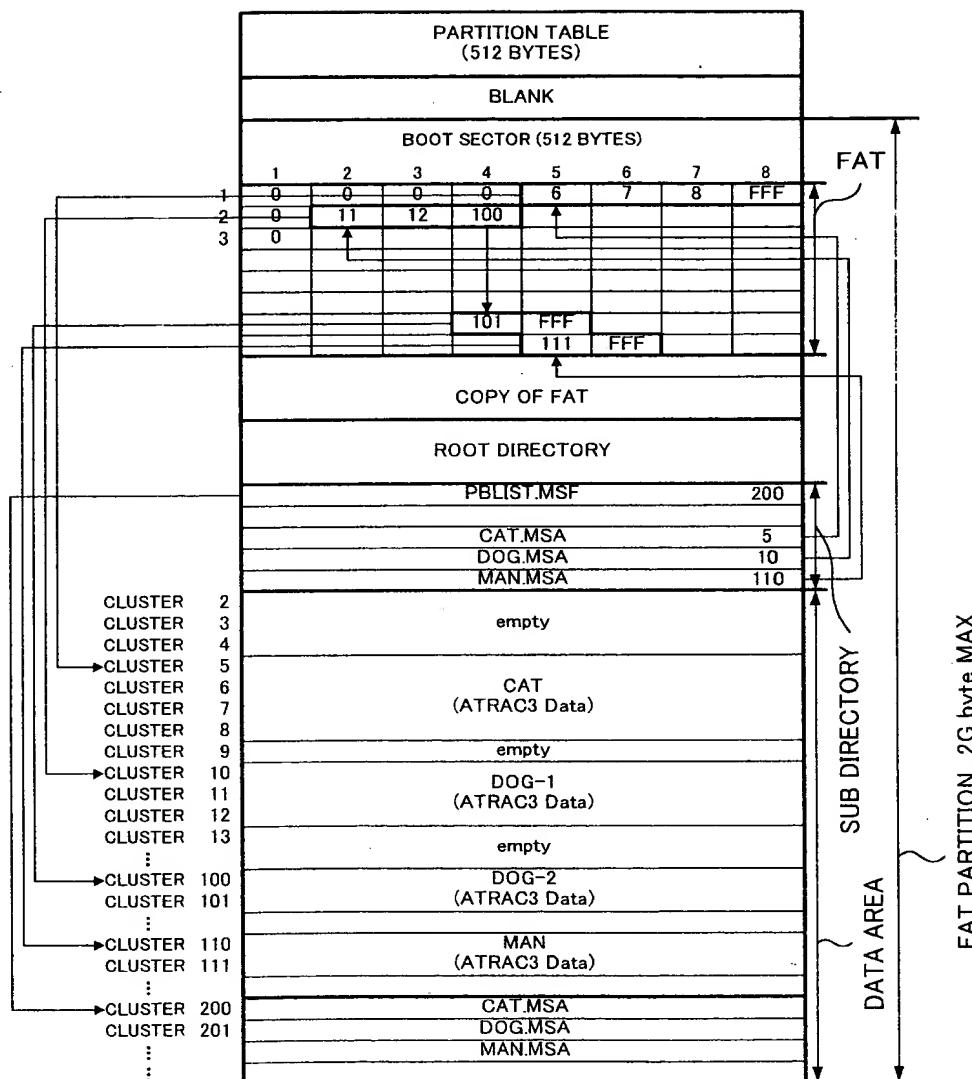


Fig. 7

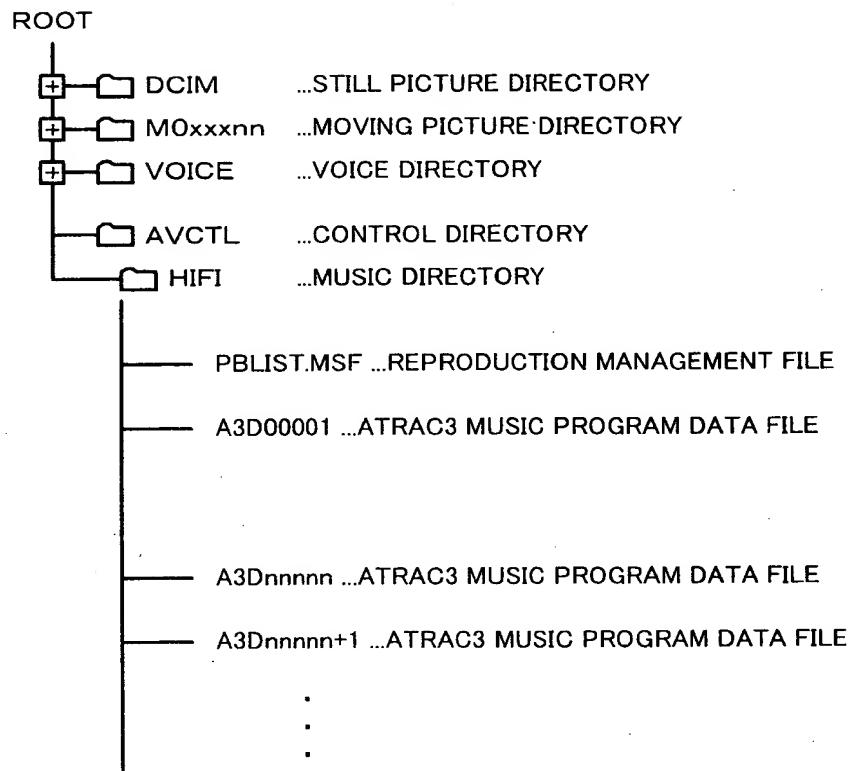
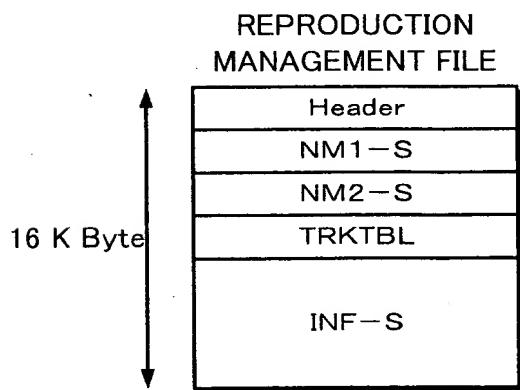


Fig. 8



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Fig. 9

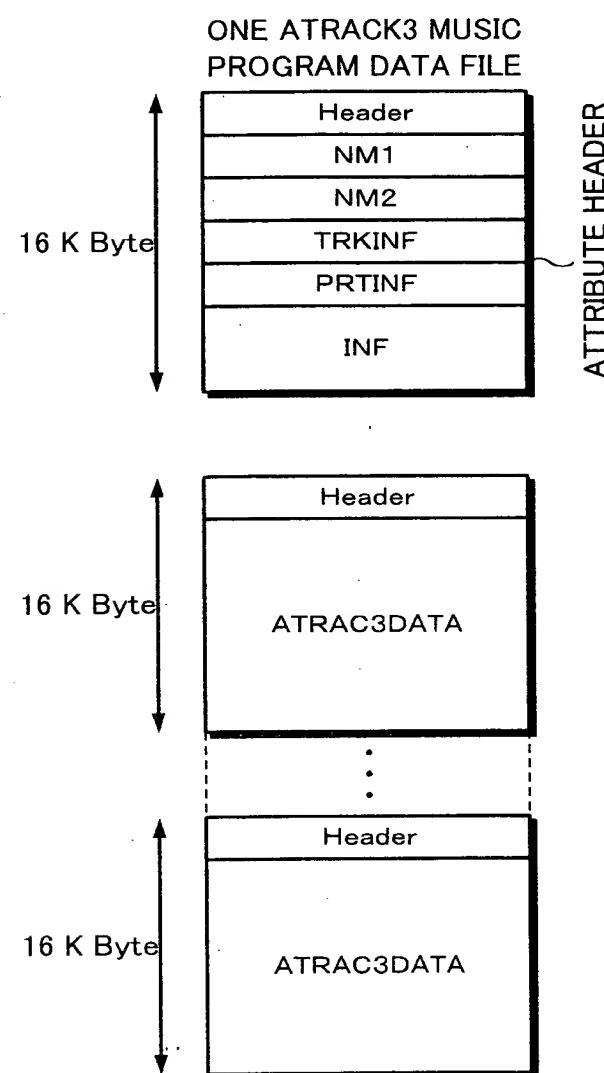


Fig. 10A

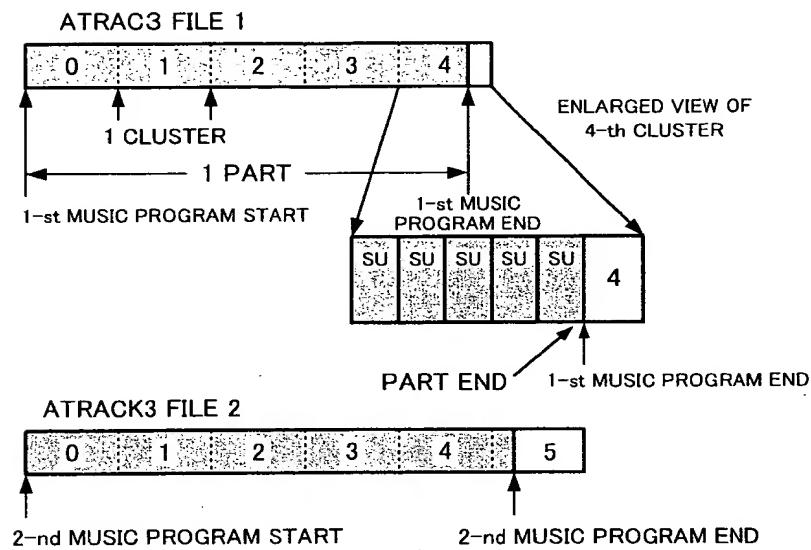


Fig. 10B

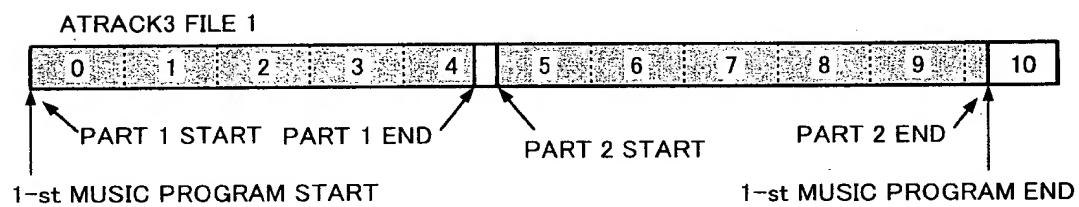
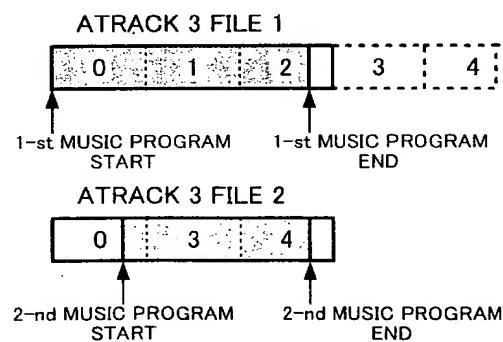


Fig. 10C



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

Fig. 11

REPRODUCTION MANAGEMENT FILE (PBLIST)

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0X0000	BLKID-TLO	Reserved		MCode			REVISION								Reserved	
0X0010	SN1C+L	SN2C+L	SINFSIZE	T-TRK	VerNo										Reserved	
0X0020	NM1-S(256)															
0X0120	NM2-S(512)															
0X0320	Reserved						CONTENTKEY									
0X0330	Reserved						MAC									
0X0350	TRK-001	TRK-002	TRK-003	TRK-004	TRK-005	TRK-006	TRK-007	TRK-008								
	TRK-009	TRK-010	TRK-011	TRK-012	TRK-013	TRK-014	TRK-015	TRK-016								
0X0660	TRK-393	TRK-394	TRK-395	TRK-396	TRK-397	TRK-398	TRK-399	TRK-400								
0X0647	INF-S(14720)															
0X3FF0	BLKID-TLO	Reserved	MCode	REVISION											Reserved	

TRKTL

APPROVED BY DRAFTSMAN	O.G. FIG. CLASS SUBCLASS
-----------------------------	--------------------------------

Fig. 12A

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0X00000	BLKID-TLO	Reserved	McCode	Revision		Reserved										
0X00100	SN1C+L	SN2C+L	SINFOSIZE	T-TRK	VerNo		Reserved									
0X00200	NM1-S(256)															
0X01200	NM2-S(512)	Reserved				CONTENTSKEY										
0X03200		Reserved			MAC											
0X03300		Reserved				S-YMDhms										
0X03500	TRK-001	TRK-002	TRK-003	TRK-004	TRK-005	TRK-006	TRK-007	TRK-008								
0X03600	TRK-009	TRK-010	TRK-011	TRK-012	TRK-013	TRK-014	TRK-015	TRK-016								
0X06600	TRK-393	TRK-394	TRK-395	TRK-396	TRK-397	TRK-398	TRK-399	TRK-400								
0X06700	INF-S(14720)															
0X3FF00	BLKID-TLO	Reserved	McCode	Revision		Reserved										

Fig. 12B

0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
INF	0x00	ID	0x00	SIZE	McCode	C+L	Reserved	DATA VARIABLE LENGTH							

Fig. 12C

APPROVED BY DRAFTSMAN	O.G. FIG. CLASS	SUBCLASS
-----------------------------	--------------------	----------

Fig. 13

ID	MUSIC INFORMATION (CHARACTERS)		ID	URL INFORMATION (WEB INFORMATION)	
0	RESERVED		32	RESERVED	
1	ALBUM	VARIABLE	33	ALBUM	VARIABLE
2	SUBTITLE	VARIABLE	34	SUB TITLE	VARIABLE
3	ARTIST	VARIABLE	35	ARTIST	VARIABLE
4	CONDUCTOR	VARIABLE	36	CONDUCTOR	VARIABLE
5	ORCHESTRA	VARIABLE	37	ORCHESTRA	VARIABLE
6	PRODUCER	VARIABLE	38	PRODUCER	VARIABLE
7	PUBLISHER	VARIABLE	39	PUBLISHER	VARIABLE
8	COMPOSER	VARIABLE	40	COMPOSER	VARIABLE
9	SONG WRITER	VARIABLE	41	SONG WRITER	VARIABLE
10	ARRANGER	VARIABLE	42	ARRANGER	VARIABLE
11	SPONSOR	VARIABLE	43	SPONSOR	VARIABLE
12	CM	VARIABLE	44	CM	VARIABLE
13	GUIDE	VARIABLE	45	GUIDE	VARIABLE
14	ORIGINAL MUSIC PROGRAM TITLE	VARIABLE	46	ORIGINAL MUSIC PROGRAM TITLE	VARIABLE
15	ORIGINAL ALBUM TITLE	VARIABLE	47	ORIGINAL ALBUM TITLE	VARIABLE
16	ORIGINAL MUSIC PROGRAM COMPOSER	VARIABLE	48	ORIGINAL MUSIC PROGRAM COMPOSER	VARIABLE
17	ORIGINAL MUSIC PROGRAM SONG WRITER	VARIABLE	49	ORIGINAL MUSIC PROGRAM SONG WRITER	VARIABLE
18	ORIGINAL MUSIC PROGRAM ARRANGER	VARIABLE	50	ORIGINAL MUSIC PROGRAM ARRANGER	VARIABLE
19	ORIGINAL MUSIC PROGRAM PERFORMER	VARIABLE	51	ORIGINAL MUSIC PROGRAM PERFORMER	VARIABLE
20	MESSAGE	VARIABLE	52		
21	COMMENT	VARIABLE	53		
22	WARNING	VARIABLE	54		
23	GENRE	VARIABLE	55		
24			56		
25			57		
26			58		
27			59		
28			60		
29			61		
30			62		
31			63		

APPROVED BY	O.G. FIG.	
DRAFTSMAN	CLASS	SUBCLASS

Fig. 14

ID	PATH/OTHERS		ID	CONTROL/NUMERIC DATA INFORMATION	
64	RESERVED		96	RESERVED	
65	PATH TO VIDEO DATA	VARIABLE	97	ISRC	8
66	PATH TO SONG DATA	VARIABLE	98	TOC_ID	8
67	PATH TO MIDI DATA	VARIABLE	99	UPC/JAN	7
68	PATH TO GUIDE DATA	VARIABLE	100	RECORDED DATE (YMDhms)	4
69	PATH TO COMMENT DATA	VARIABLE	101	RELEASED DATE	4
70	PATH TO CM DATA	VARIABLE	102	ORIGINAL MUSIC PROGRAM RELEASED DATE (YMDhms)	4
71	PATH TO FAX DATA	VARIABLE	103	RECORDED DATE (YMDhms)	4
72	PATH TO COMMUNICATION DATA 1	VARIABLE	104	SUB TRACK	4
73	PATH TO COMMUNICATION DATA 2	VARIABLE	105	AVERAGE VOLUME LEVEL	1
74	PATH TO CONTROL DATA	VARIABLE	106	RESUME	4
75			107	REPRODUCTION LOG (YMDhms)	4
76			108	NUMBER OF REPRODUCTION TIMES (FOR LEARNING)	1
77			109	PASSWORD 1	16
78			110	APPLevel	16
79			111	GENRE CODE	1
80			112	MIDI DATA	
81			113	THUMB NAIL PHOTOGRAPH DATA	
82			114	TEXT MULTIPLEXED BROADCAST DATA	
83			115	NUMBER OF TOTAL MUSIC PROGRAMS	
84			116	SET NUMBER	
85			117	NUMBER OF TOTAL SETS	
86			118	REC POSITION INFORMATION - GPS	VARIABLE
87			119	PB POSITION INFORMATION - GPS	VARIABLE
88			120	REC POSITION INFORMATION - PHS	VARIABLE
89			121	PB POSITION INFORMATION - PHS	VARIABLE
90			122	CONNECTION DESTINATION TELEPHONE NUMBER 1	VARIABLE
91			123	CONNECTION DESTINATION TELEPHONE NUMBER 2	VARIABLE
92			124	INPUT VALUE	VARIABLE
93			125	OUTPUT VALUE	VARIABLE
94			126	PB CONTROL DATA	VARIABLE
95			127	REC CONTROL DATA	VARIABLE

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Fig. 15

ID	SYNCHRONOUS REPRODUCTION INFORMATION	
128	RESERVED	
129	SYNCHRONOUS REPRODUCTION INFORMATION 1	VARIABLE
130	SYNCHRONOUS REPRODUCTION INFORMATION 2	VARIABLE
131	SYNCHRONOUS REPRODUCTION INFORMATION 3	VARIABLE
132	SYNCHRONOUS REPRODUCTION INFORMATION 4	VARIABLE
133	SYNCHRONOUS REPRODUCTION INFORMATION 5	VARIABLE
134	SYNCHRONOUS REPRODUCTION INFORMATION 6	VARIABLE
135		
136		
137		
138	EMD INFORMATION 1	VARIABLE
139	EMD INFORMATION 2	VARIABLE
140		
141		
142		
143		
144		
145		
146		
147		
148		
149		
150		
151		
152		
153		
154		
155		
156		
157		
158		
159		

Fig. 16A

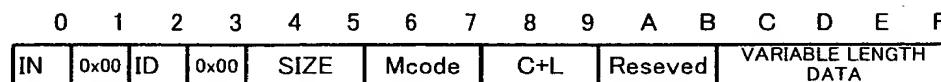


Fig. 16B

ID	ARTIST	SIZE	ASCII ENGLISH								DATA					
0x69	0x00	3	0x00	0x1C(28)	M	c	o	d	0x01	0x09	0x00	0x00	S	I	M	O
N	&	G	R	A	F	U	N	K	E	L		0x00				

Fig. 16C

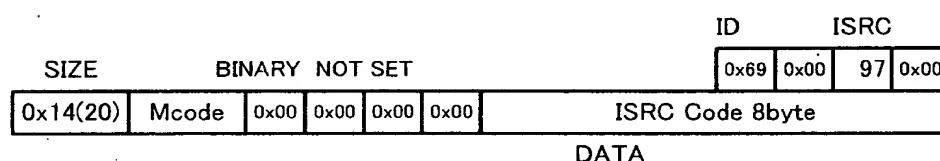


Fig. 16D

RECORDED DATE	SIZE	BINARY	NOT SET	DATA
0x69	0x00	103	0x00	0x10(16) Mcode 0x00 0x00 0x00 0x00 YMD hms
745	565			

Fig. 16E

REPRODUCTION LOG	SIZE	BINARY NOT SET	DATA
0x69	0x00	107	0x00 0x10(16) Mcode 0x00 0x00 0x00 0x00 YMD hms
745	565		

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Fig. 17

A3Dnnnn.MSA(ATRAC3 DATA FILE)

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0x0000	BLKID-HD0	Reserved	MCode		Reseved						BLOCK SERIAL					
0x0010	N1C+L	N2C+L	INFSIZE	T-PRT		T-SU					INX		XT			
0x0020	NM1(256)															
0x0120	NM2(512)															
0x0310																
0x0320	Reserved(8)										CONTENTSKEY					
	Reserved(8)										MAC					
	Reserved(12)										A	LT	FNo			
0x0360	CONNUM	YMDhms-S		YMDhms-E		MT	CT	CC	CN							
0x0370	PRTSIZE		PRTKEY			Reserved(8)										
0x0380		CONNUM0	PRTSIZE(0x0388)			PRTKEY										
0x0390		Reserved(8)				CONNUM0										
	INF(0x0400)															
0x3FFF	BLKID-HD0	Reserved	MCode		Reseved						BLOCK SERIAL					
0x4000	BLKID-A3D	Reserved	MCode		CONNUM0						BLOCK SERIAL					
0x4010		BLOCK SEED				INITILIZATION VECTOR										
0x4020						SU-000(Nbyte=384byte)										
0x41A0						SU-001(Nbyte)										
0x4320						SU-002(Nbyte)										
0x04A0						SU-041(Nbyte)										
0x7DA0						Reserved(Nbyte=208byte)										
0x7F20		BLOCK SEED														
0x7FF0	BLKID-A3D	Reserved	MCode		CONNUM0						BLOCK SERIAL					

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Fig. 18

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0x0000	BLKID-HD0		Reserved		MCode		Reseved				BLOCK SERIAL					
0x0010	N1C+L	N2C+L		INFSIZE	T-PRT		T-SU				INX		XT			
0x0020	NM1(256)															
0x0120	NM2(512)															
0x0310																

Fig. 19

0x0320	Reserved(8)		CONTENTSKEY				
	Reserved(8)		MAC				
	Reserved(12)				A		LT
	MG(D)SERIAL-nnn				FNo		
0x0360	CONNUM	YMDhms-S	YMDhms-E	MT	CT	CC	CN

Fig. 20

bit7:MODE OF ATRAC3 0:Dual 1:Joint

bit6,5,4 N OF 3 BITS:MODE VALUE

N	MODE	TIME	TRANSMISSION RATE	SU	BYTES
7	HQ	47min	176kbps	31SU	512
6		58min	146kbps	38SU	424
5	EX	64min	132kbps	42SU	384
4	SP	81min	105kbps	53SU	304
3		90min	94kbps	59SU	272
2	LP	128min	66kbps	84SU	192
1	mono	181min	47kbps	119SU	136
0	mono	258min	33kbps	169SU	96

bit3:Reserved

bit2:DATA TYPE 0:AUDIO 1:OTHER

bit1:REPRODUCTION SKIP 0:NORMAL REP 1:SKIP

bit0:EMPHASIS 0:OFF 1:ON(50/15 μ S)

Fig. 21

bit7	:COPY PERMISSION	0:COPY PROHIBITION	1:COPY PERMISSION
bit6	:GENERATION	0:ORIGINAL	1:FIRST OR LATER COPY GENERATION
HCMS bit5-4	:COPY CONTROL FOR HIGH SPEED DIGITAL COPY		
	00:COPY PROHIBITION	01:COPY FIRST GENERATION	10:COPY PERMISSION
	COPY OPERATION OF CHILD OF FIRST COPY GENERATION IS PROHIBITED.		
bit3-2	MagicGate AUTHENTICATION LEVEL		
	00:Level10(Non-MG)	01:Level1	
	10:Level2	11:Reserved	
	DIVIDE AND COMBINE ARE PROHIBITED IN OTHER THAN LEVEL 10.		
bit1,0	Reserved		

Fig. 22

0x0370	PRTSIZE	PRTKEY		Reserved(8)
0x0380		CONNUM0	PRTSIZE(0x0388)	PRTKEY
0x0390		Reserved(8)		CONNUM0

Fig. 23

0x4000	BLKID-A3D	Reserved	MCode	CONNUM0	BLOCK SERIAL
0x4010	BLOCK SEED		INITILIZATION VECTOR		
0x4020	SU-000(Nbyte=384byte)				

APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

Fig. 24A

Fig. 24

Fig. 24A
Fig. 24B
Fig. 24C

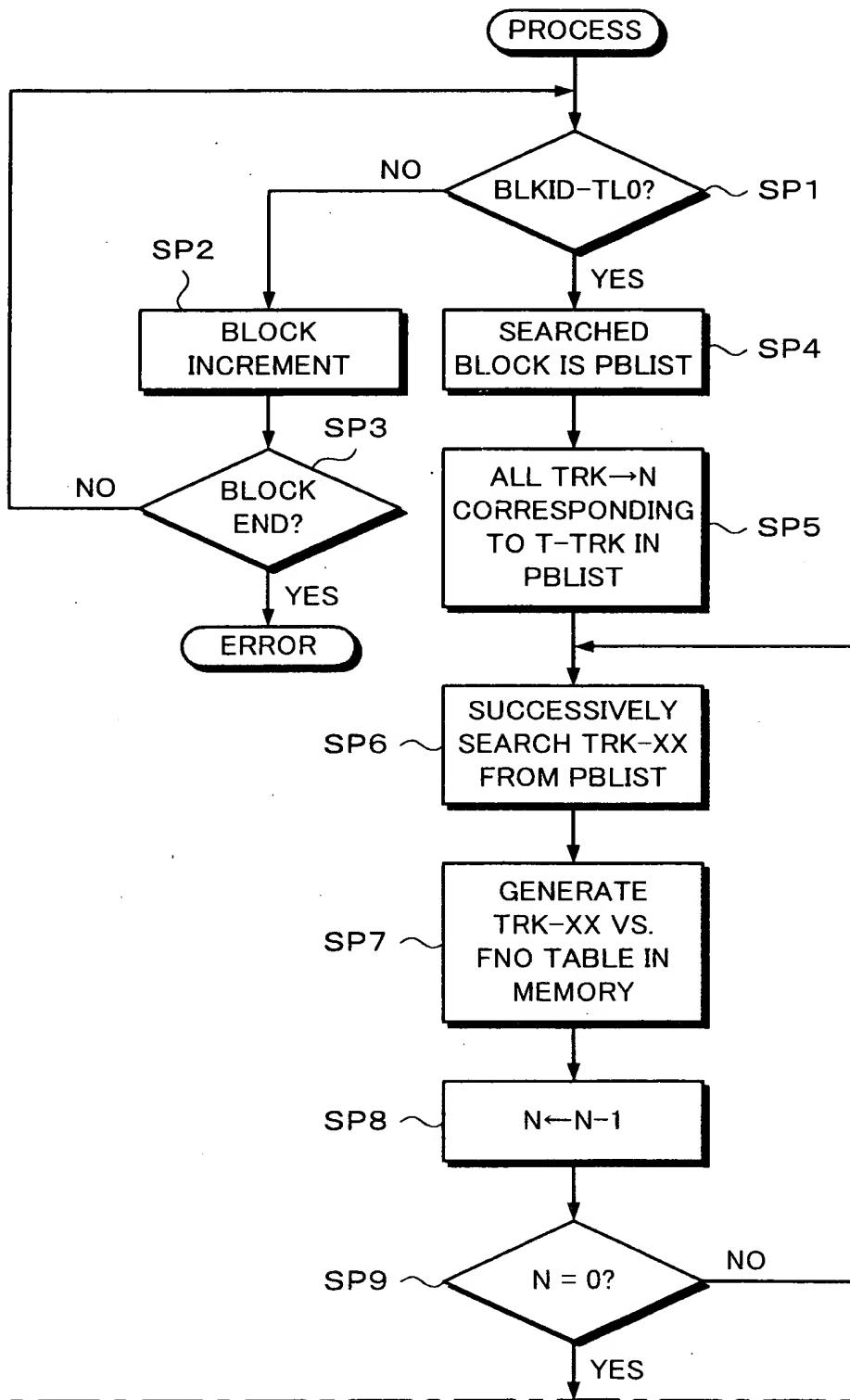
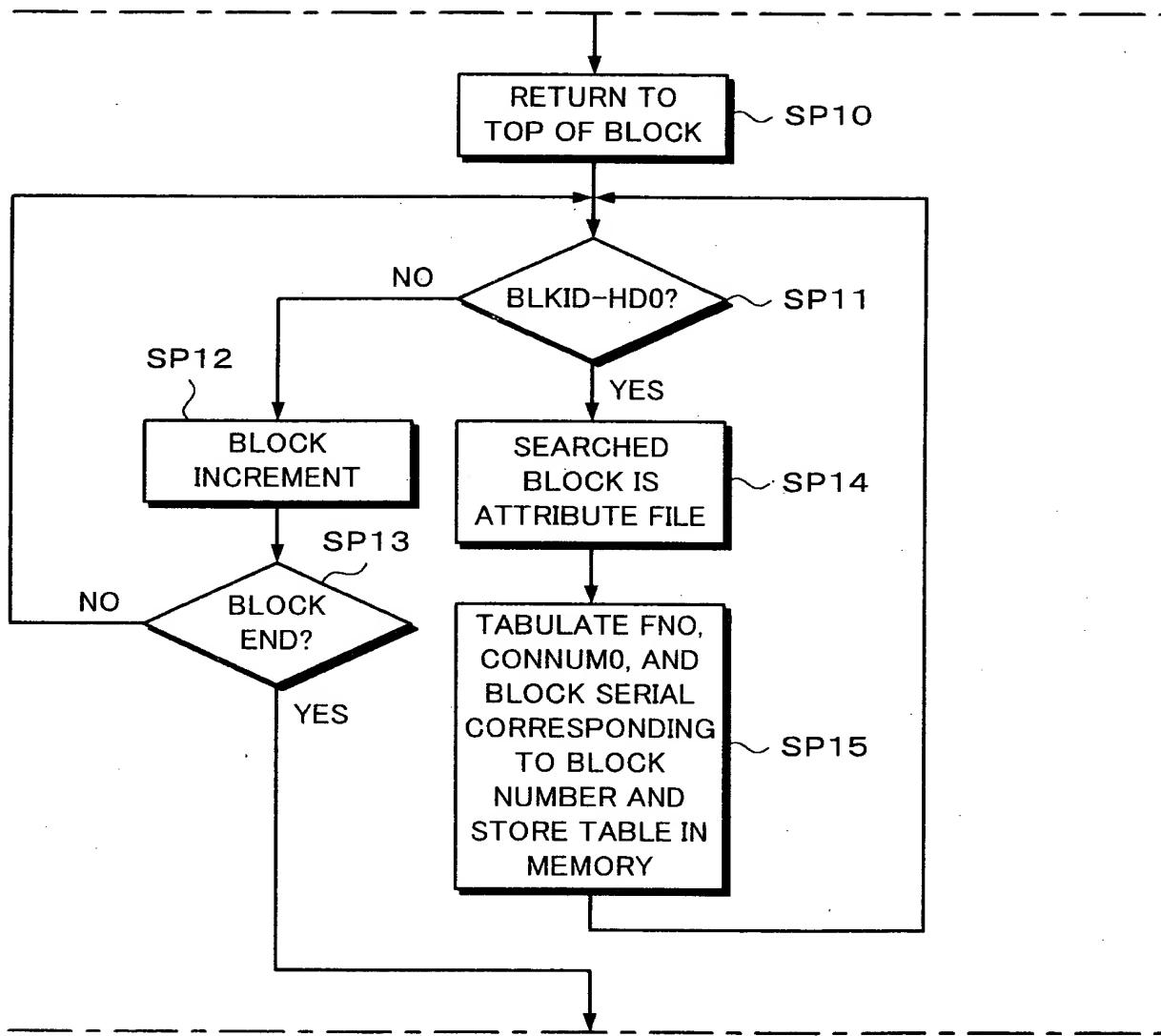
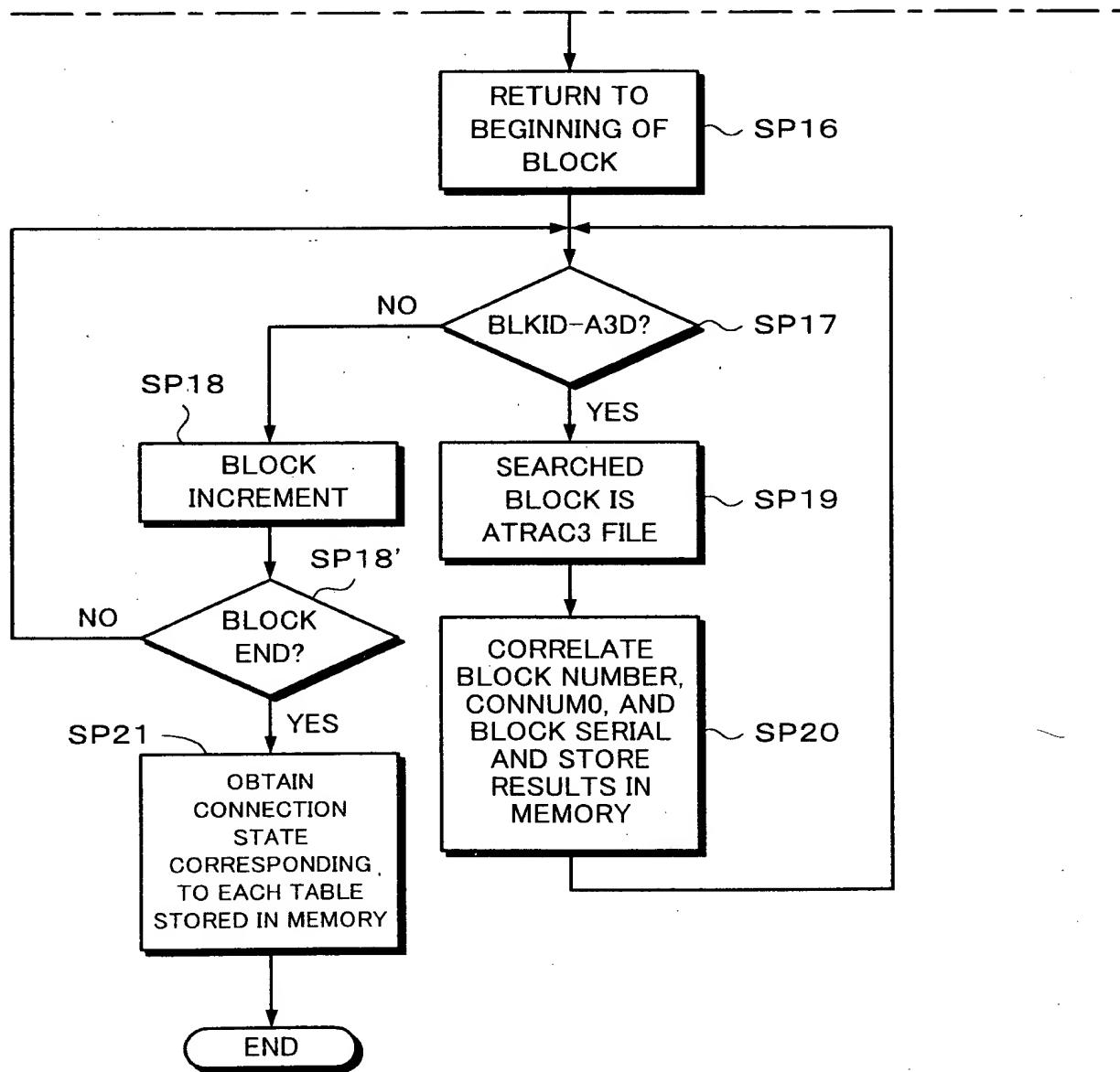


Fig. 24B



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

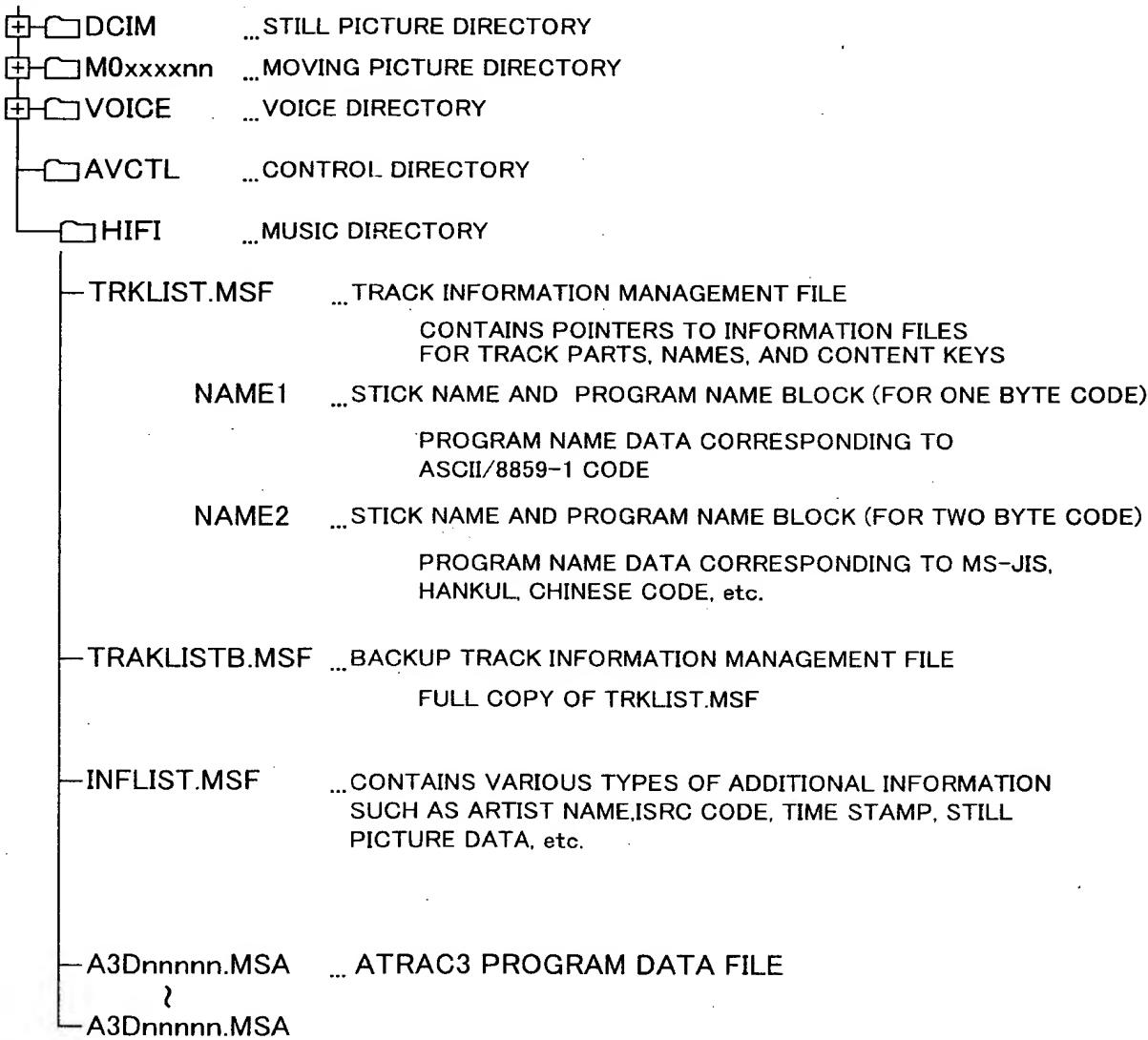
Fig. 24C



APPROVED	O.G. FIG:
BY	CLASS
DRAFTSMAN	SUBCLASS

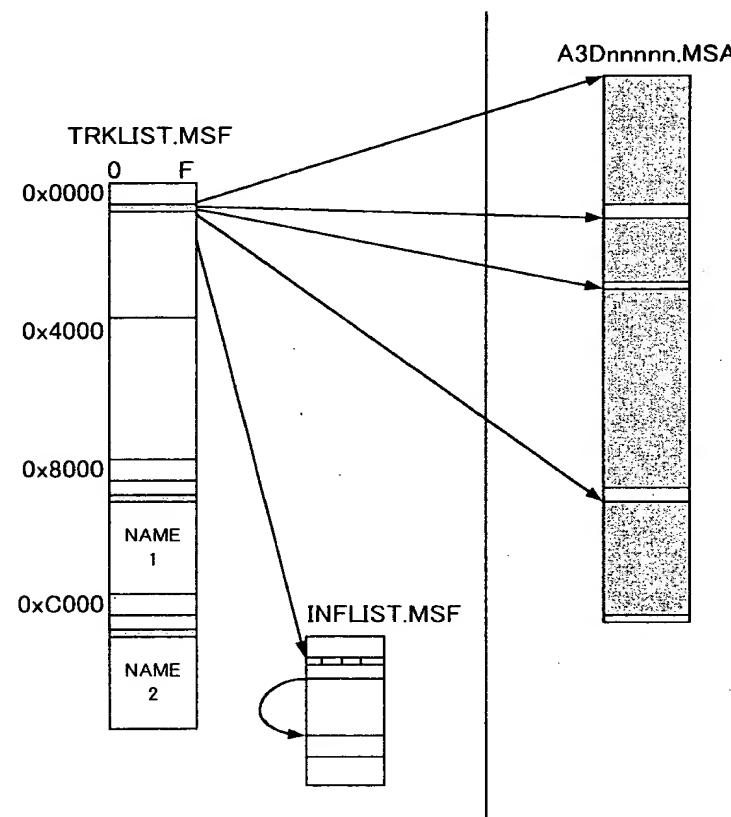
Fig. 25

ROOT



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

Fig. 26



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Fig. 27

TRACK INFORMATION MANAGEMENT FILE (TRKLIST.MSF)

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Fig. 28

STICK NAME AND PROGRAM NAME BLOCK-FOR ONE BYTE CODE

	0	1	2	3	4	5	6	7
0x8000	BLK ID-NM1						MCode	
0x8008	PNM1-S				PNM1-001			
0x8010	PNM1-002				PNM1-003			
					S			
0x8668	PNM1-408				NM1-S			
					NM1-001			
					NM1-002			
					NM1-003			
					S			
					NM1-408			
0xBFF0								
0xBFF8	BLK ID-NM1						MCode	

Fig. 29

STICK NAME AND PROGRAM NAME BLOCK-FOR TWO-BYTE CODE

	0	1	2	3	4	5	6	7
0xC000	BLK ID-NM2						MCode	
0xC008	PNM2-S				PNM2-001			
0xC010	PNM2-002				PNM2-003			
					S			
0xC668	PNM2-408				NM2-S			
					NM2-001			
					NM2-002			
					NM2-003			
					S			
					NM2-408			
0xFFFF								
0xFFFF8	BLK ID-NM2						MCode	

APPROVED BY DRAFTSMAN	O.G. FIG. CLASS	SUBCLASS
-----------------------------	--------------------	----------

Fig. 30

ATRAC3 DATA FILE (A3Dnnnn.MSA) ... 1 SoundUnit=N BYTES

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Fig. 31

ADDITIONAL INFORMATION MANAGEMENT FILE (INFLIST.MSF)

Fig. 32

ADDITIONAL INFORMATION DATA STRUCTURE

APPROVED	O. G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

Fig. 33

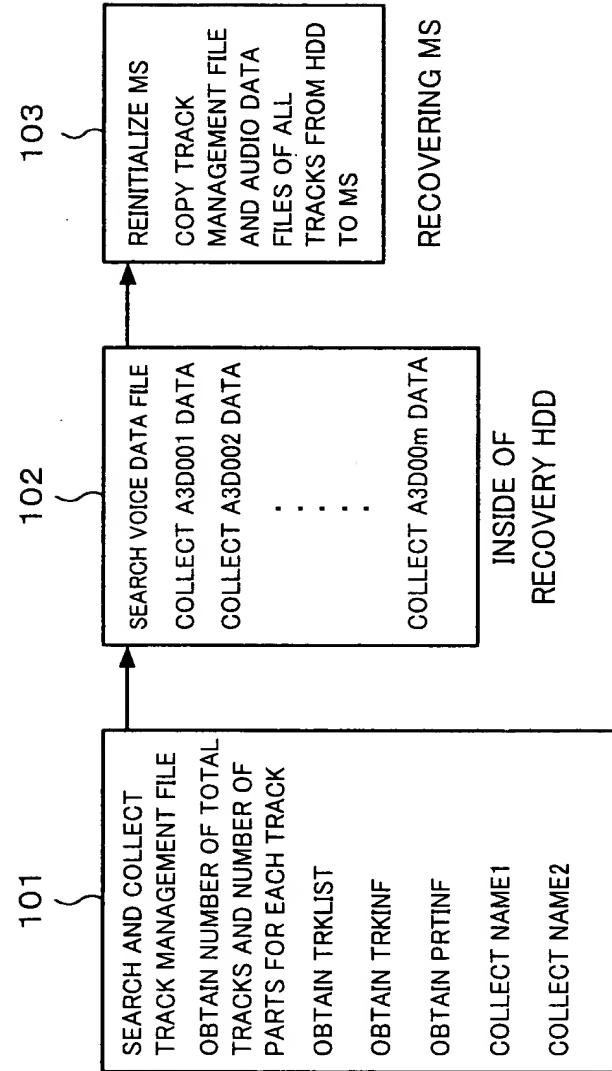


Fig. 34

RELATION BETWEEN DATA BYTES AND TRANSMISSION RATES

TRANSMISSION RATE	BYTES	BYTES	TRANSMISSION RATE	SU	SECONDS	MINUTES	Stereo(MINUTES)	Mono(MINUTES)	NUMBER OF REMAINING BYTES	NUMBER OF REMAINING SLOTS
88.2	256	512	176.4	31	2853.361	47.5556	47	95	512	64
85.4	248	496	170.9	33	3037.449	50.624	50	101	16	2
82.7	240	480	165.4	34	3129.493	52.158	52	104	64	8
79.9	232	464	159.9	35	3221.537	53.692	53	107	144	18
77.2	224	448	154.4	36	3313.58	55.226	55	110	256	32
74.4	216	432	148.8	37	3405.624	56.760	56	113	400	50
MD Data	NONE	424	146.1	38	3497.668	58.294	58	NONE	272	34
71.7	208	416	143.3	39	3589.712	59.829	59	119	160	20
68.9	200	400	137.8	40	3681.756	61.363	61	122	384	48
66.2	192	384	132.3	42	3865.844	64.431	64	128	256	32
63.4	184	368	126.8	44	4049.932	67.499	67	134	192	24
60.6	176	352	121.3	46	4234.019	70.567	70	141	192	24
57.9	168	336	115.8	48	4418.107	73.635	73	147	256	32
55.1	160	320	110.3	51	4694.239	78.237	78	156	64	8
52.4	152	304	104.7	53	4878.327	81.305	81	162	272	34
49.6	144	288	99.2	56	5154.458	85.908	85	171	256	32
46.9	136	272	93.7	60	5522.664	92.044	92	184	64	8
44.1	128	256	88.2	63	5798.766	96.646	96	193	256	32
41.3	120	240	82.7	68	6258.985	104.316	104	208	64	8
38.6	112	224	77.2	72	6627.161	110.453	110	220	256	32
35.8	104	208	71.7	78	7179.424	119.657	119	239	160	20
	NONE	200	68.9	81	7455.556	124.259	124	NONE	184	23
33.1	96	192	66.2	85	7823.732	130.396	130	260	64	8
30.3	88	176	60.6	92	8468.039	141.134	141	282	192	24
27.6	80	160	55.1	102	9388.478	156.475	156	312	64	8
73	146	503	112	10308.92	171.815	171	343	32	4	